

REPLACEMENT SHEET

FIG. 1A

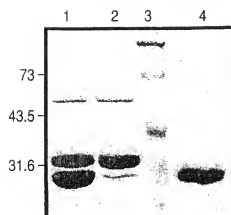


FIG. 1B

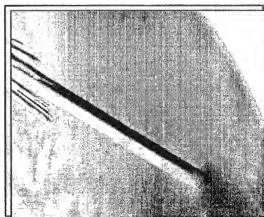
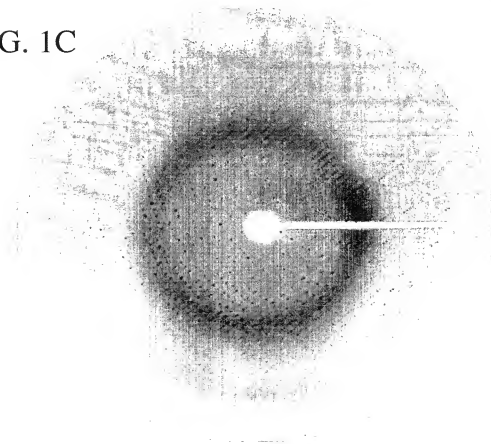


FIG. 1C



REPLACEMENT SHEET

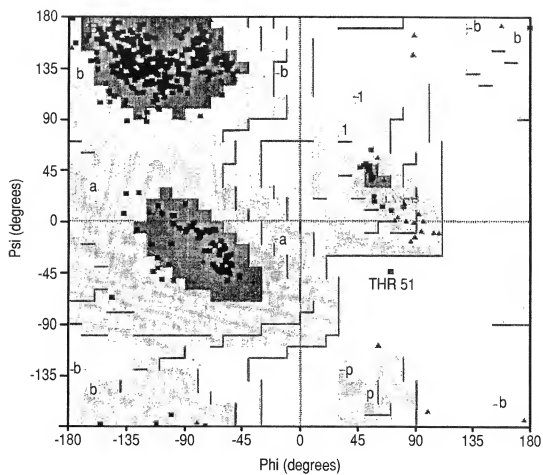


FIG. 1D

FIG. 2B

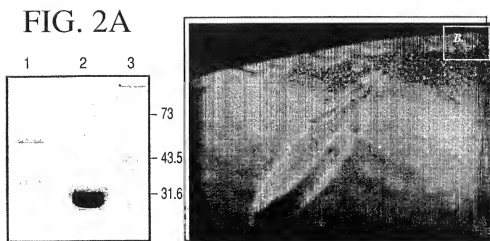
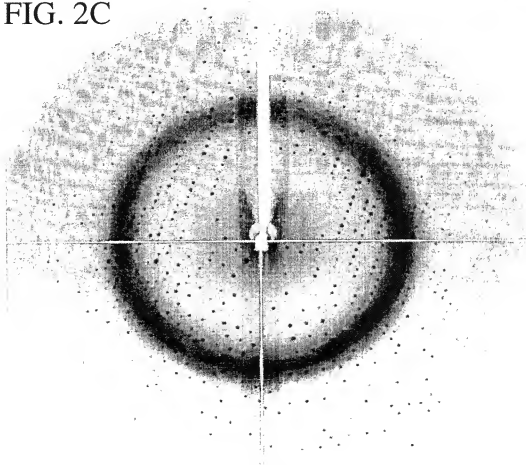


FIG. 2C



REPLACEMENT SHEET

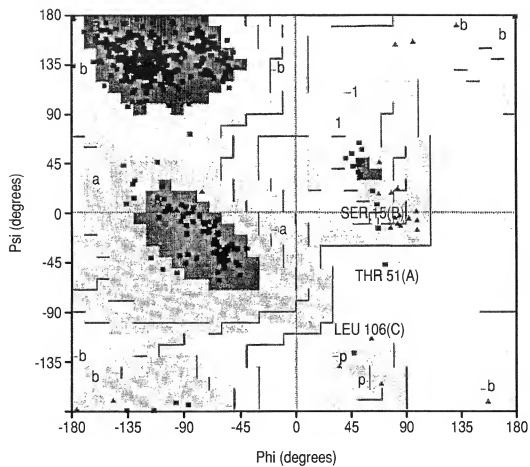


FIG. 2D

REPLACEMENT SHEET

FIG. 3A

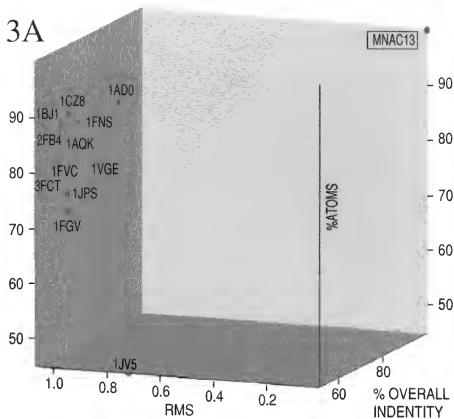
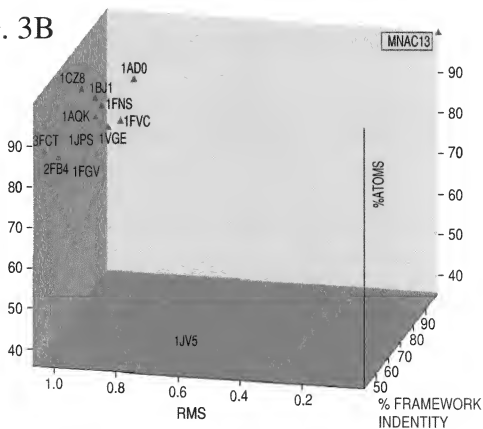


FIG. 3B



REPLACEMENT SHEET

FIG. 3C

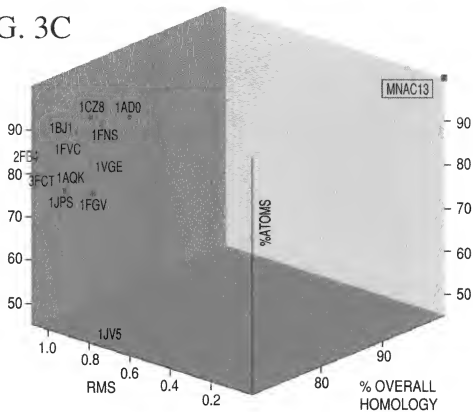
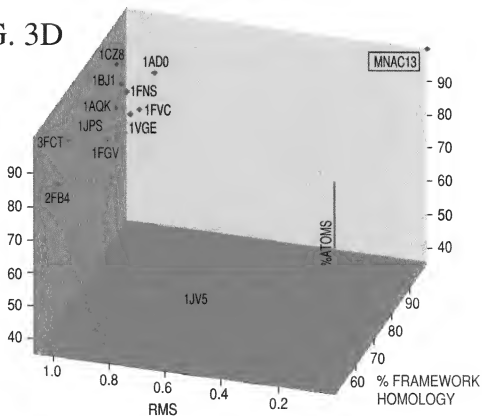


FIG. 3D



REPLACEMENT SHEET

Identity with MNAC13

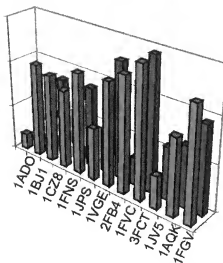


FIG. 3E

Homology with MNAC13

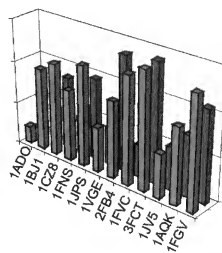


FIG. 3F

REPLACEMENT SHEET

FIG. 3G

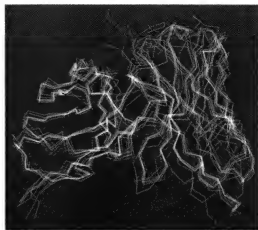


FIG. 3H

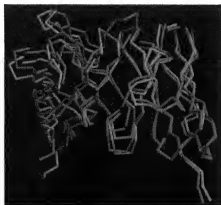


FIG. 3I

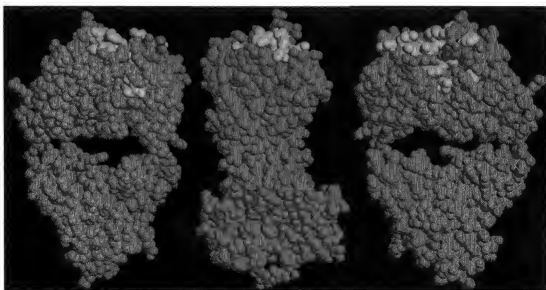
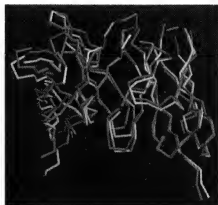


FIG. 3J

REPLACEMENT SHEET

FIG. 4A

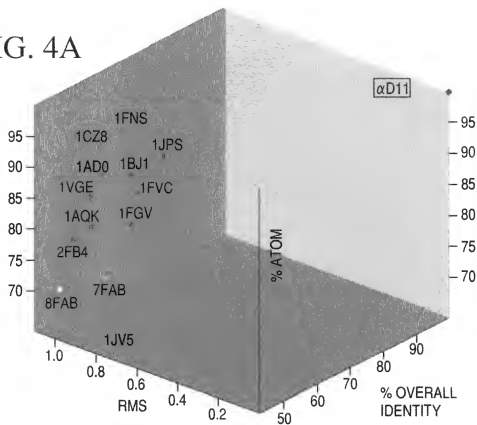
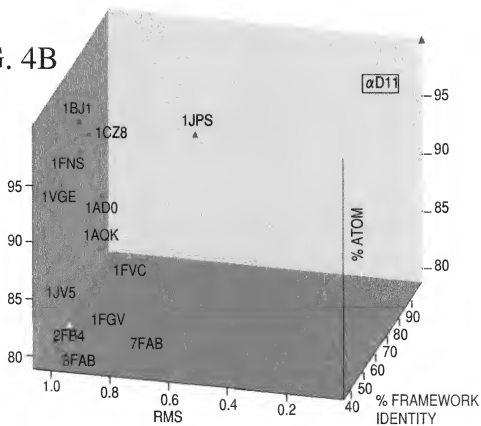


FIG. 4B



REPLACEMENT SHEET

FIG. 4C

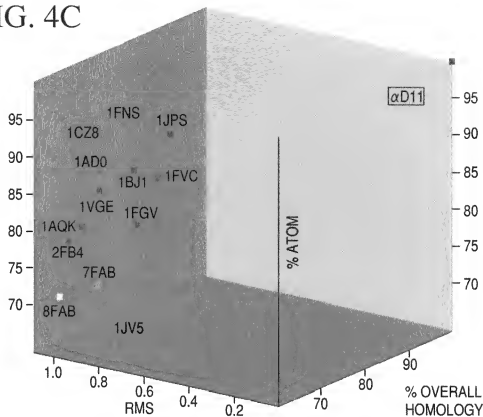
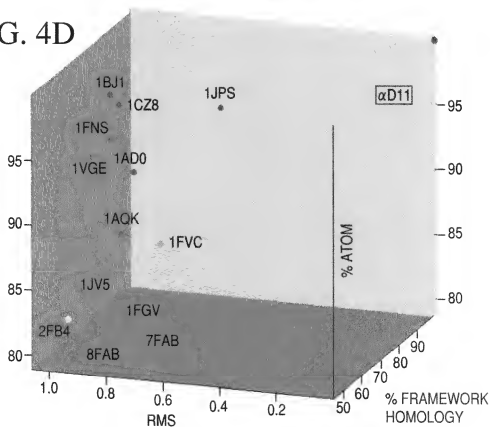


FIG. 4D



REPLACEMENT SHEET

Identity with α D11

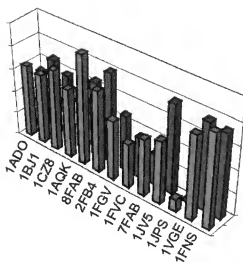


FIG. 4E

Homology with α D11

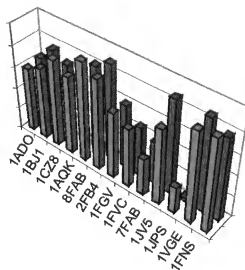


FIG. 4F

REPLACEMENT SHEET

FIG. 4G

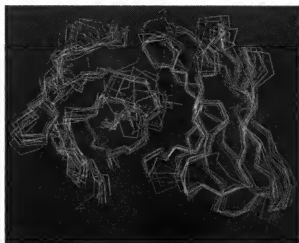


FIG. 4H



FIG. 4I

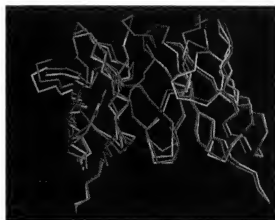
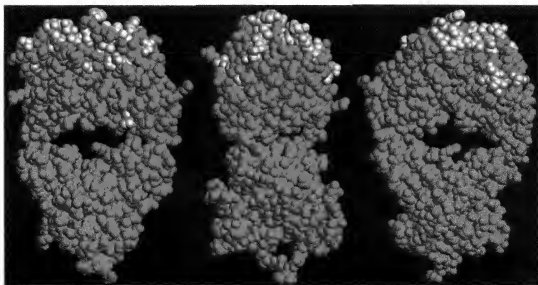


FIG. 4J



REPLACEMENT SHEET

FIG. 5

A. Fv fragment of heavy chain

		20	40
MNAC13	EVKLVESGGGLVQPGGSLKLSCAASGFTTFSTYTM	SWARQTP	PEKRLEWVAYISKG--
1AD0	EVQLLES	GGGLVQPGGSLRL	SCATSGFTFTDYIMN
Hum MNAC13	EVQLLES	GGGLVQPGGSLRL	SCAASGFTTFSTYTM
			SWARQAPGKGLEWVAYISKG--
	60	80	100
MNAC13	GGSTYYPDIVKGRFTISRDN	AKNTLYLQMSLKS	EDTALYYCARGAMFGNDFFFPMD
1AD0	GYTTEYSASV	KGRFTISRDKSKSTLYLQ	MNTLQAEDSAIYYCTRDR---
Hum MNAC13	GGSTYYPDIVKGRFTISRDN	SKNTLYLQMSLRAEDSA	VYYCARGAMFGNDFFFPMD
MNAC13	RWGQGT	SVTVSSA	
1AD0	YWGQGT	LVTVSSA	
Hum MNAC13	RWGQGT	LVTVSSA	

B. Fv fragment of light chain

		20	40
MNAC13	DIVLTQSP	AIMSASLGE	EVLTCSSASSVS
1AD0	QTVLTQSP	SSLVS	VGDRVTITCRASSSV
Hum MNAC13	DIVLTQSP	SSLVS	VGDRVTITCRASSSV
			SYMHWTQKPGQAPKLLIYTTSNL
	60	80	100
MNAC13	ASGVPSR	FGSGSGTFYSLT	ISSVEAEDAADYYCHQWSSYP
1AD0	ASGVPSR	FGSGSGTDY	TFTISSLPEDIATYYC
Hum MNAC13	ASGVPSR	FGSGSGTDY	TFTISSLPEDVATYYC
			QHWSSKPTFCQG

REPLACEMENT SHEET

FIG. 6

A. Fv fragment of heavy chain

	20	40
α D11	QVQLKESGPGLVQPSQTLSTCTVSGFSLTNNVNVVRQATGRGLEWMGGVWAG-G	
1JPS	EVQLVESGGGLVQPGGSLRLSCAASGFNIKEYMHVVRQAPGKGLEWVGLIDPEQG	
Hum α D11	EVQLVESGGGLVQPGGSLRLSCAASGFSLTNNVNVVRQAPGKGLEWVGGVWAG-G	
	60	80
α D11	ATDYNALKSRITITRDTSKSQVFLKMHSLQSEDATYYCARDGGYSSSTLYAMD	
1JPS	NTIYDPKPKQDRATISADNSKNTAYLQMNSLRAEDTAVYYCARDTAA-----YFD	
Hum α D11	<u>ATDYNALKSRFTISRDNKNTAYLQMNSLRAEDTAVYYCARDGGYSSSTLYAMD</u>	
	60	80
α D11	AWGQGTITVTSA	
1JPS	YWGQGTITVTSS	
Hum α D11	<u>AWGQGTITVTSS</u>	

B. Fv fragment of light chain

	20	40
α D11	DIQMTQSPASLSASLGFTVTIECRASEDIYNALAWYQQKPKGPKQLLIYNNTDL	
1JPS	DIQMTQSPSSLSASVGDRTITCRASRDIKSYLNWYQQKPKGKAPKVLIIYATSL	
Hum α D11	DIQMTQSPSSLSASVGDRTITCRASEDIYNALAWYQQKPKGKAPKLLIYNNTDL	
	60	80
α D11	HTGVPSRFSGSGSGTQYSLKINSLSQSEDVASYFCQHYFHYPRTFGGGKTLELK	
1JPS	AEGVPSRFSGSGSGTDYTLTISSLPQEDFATYYCLQHGSPWTFGQGTKEIK	
Hum α D11	<u>HTGVPSRFSGSGSGTDYTLTISSLPQEDFATYYCQHYFHYPRTFGQGTKEIK</u>	

FIG. 7

A) MNAC13 VL

GAC ATT GTT CTC TCC CAG TCT CCA GCA ATC ATG TCT GCA TCT CTA GGG GAG GAG ATC ACC CTA ACC TGC AGT GCC AGC
 TTG AGT GTA AGT TAC TGG TAC CAG CAG AAG TCA GGC ACT TCT CCC AAG CTC TTG ATT TAT ACT ACA TCC AAC
 CTG GCT TCT GGA CTC CCT TCT CGC TTC AGT GGC AGT GGG TCT GGG ACC TTT TAT TCT CTC ACA ATC AGT AGT GTG GAG
 GCT GAA GAT GCT GCC GAT TAT TAC TGC CAT CAG TGG AGT AGT TAT CCA TGG AGG TTC GGT GGA GGC ACC AAG CTG GAA
 ATC AAA

B) MNAC13 VH

GAG GTG AAG CTG GTG GAG TCT GGG GGA GGT TTA GTG CAG CCT GGA GGG TCC CTG AAA CTC TCC TGT GCA GCC TCT GGA
 TTC ACT TTC AGT ACC TAT ACC ATG TCT TGG GCT CGC CAG ACA CCA GAG AAG AGG CTG GAG TGG GTC GCA TAC ATT AGT
 AAA GGT GGT AGT ACC TAC TAT CCA GAC ACT GTA AAG GGC CGA TTC ACC ATC TCC AGG GAC AAT GGG AAG AAC ACC
 CTG TAC CTG CAA ATG AGC AGT CTG AAG TCT GAG GAC ACG GCC TTG TAT TAC TGT GCA AGA GGG GCT ATG TAT GGT AAC
 GAT TTT TTC TAT CCT ATG GAC TAC TGG GGT CAA GGA ACC TCA GTC ACC GTC TCC TCA

REPLACEMENT SHEET

C/MNAC13 GRATED VL

5'	D	I	V	L	T	Q	S	P	S	S	L	S	A	S	V	G	D	R	V	T	I	T	C	S	3'																					
	OLIGO L1S																																													
	ACA	GGC	GTG	CAC	TCC	GAC	ATT	GTT	CTC	ACC	CAG	TCT	CCA	TCC	AGC	CTG	TCT	GCG	TCT	GTC	GGG	GAC	CGG	GTG	ACC	ATT																				
	CAG CCC CTG GGC CAG TGG TAA TGG ACG TCG																																													
3'																																														
5'	A	S	S	S	V	S	Y	M	H	W	Y	Q	Q	K	P	G	K	A	P	X	L	L	I	Y	T	S	N	L																		
	OLIGO L1S																																													
5'	TGG	TAC	CAG	CAG	AMG	CCA	GGC	AMG	GCT	CCC	AMG	CTC	CTG	ATT	TAT	ACT	ACA	TCC	AMC	CTG							GAC	5'																		
3'	CGG	TGG	AGA	TCA	CAC	TCA	ATG	TAC	GTG	ACC	ATG	GTG	CTC	CTC	CTC	CTC	CTC	CTC	CTC	CTC							GAC	5'																		
	OLIGO L2AS																																													
5'	A	S	G	V	P	S	R	F	S	G	S	G	S	G	T	D	Y	T	L	T	I	S	S	L	Q	P	E	D	F																	
	OLIGO L3S																																													
5'	GCT	TCT	GGG	GTG	CCT	TCT																			ACC	CTC	ACA	ATC	AGT	AGT	CTG	CAG	CCT	GAA	GAT	TTT										
3'	CGA	AGA	CCT	CAG	GGG	AGA	GCG	AMG	TGG	CGG	TCA	CCC	AGA	CCC	TGG	CTA	ATA	TGG	GAG	TGT	TAG	TCA	TCA	GAC					5'																	
	OLIGO L4AS																																													
5'	A	T	Y	Y	C	H	Q	W	S	S	Y	P	W	T	F	G	G	T	K	V	E	I	K					3'																		
	OLIGO L5S																																													
5'	GGC	ACC	TAT	TAC	TGC	CAT	CAG	TGG	AGT	AGT	TAT	CCA	TGG	ACG											ACC	TCA	TCA	ATA	GGT	ACC	TGC	AMG	CCA	CCT	CGG	TGG	TTT	CAC	CTT	TAT	TTT	GCA	CTC	ATC	TTA	TTT
3'	OLIGO L6AS																																													
	AGA	TTG	AAT																						5'																					

FIG. 7 continued

FIG. 7 continued

E/OLIGOS TO SYNTHESIZE MNAC13 VLOLIGO L1S

ACA GGC GTG CAG TCC GAC ATT GTT CTC ACC CAG TCT CCA TCC AGC CTG TCT GCG TCT GTC GGG GAC CGG GTC ACC ATT

OLIGO L2AS

GCC TGG CTT CTG CTG GTA CCA GTC CAT GTA ACT CAC ACT AGA GGT GGC GGT GCA GGT AAT GGT GAC CCG GTC CCC GAC

OLIGO L3S

TGG TAC CAG CAG AAG CCA GGC AAG GCT CCC AAG CTC CTG ATT TAT ACT ACA TCC AAG CTG GCT TCT GGA GTC CCT TCT

OLIGO L4AS

CAG ACT ACT GAT TGT GAG GGT ATA ATC GGT CCC AGA CCC ACT GCC GCT GAA GCG AGA AGG GAC TCC AGA AGC CAG

OLIGO L5S

ACC CTC ACA ATC AGT AGT CTG CAG CCT GAA GAT TTC GGC ACC TAT TAC TGC CAT CAG TGG AGT AGT TAT CCA TGG ACG

OLIGO L6AS

TAA GTT AGA TCT ATT CTA CTC ACG TTT TAT TTC CAC CTT GGT GCC TCC ACC GAA CGT CCA TGG ATA ACT ACT CCA

F/OLIGOS TO SYNTHESIZE MNAC13 VHOLIGO H1S

ACA GGC GCG CAC TCC GAG GTG CAG CTG CAG TCT GGG GGA GGT TTA GTG CAG CCT GGA GGG TCC CTG CCG CTC TCC TGT

OLIGO H2AS

CCC TGG GGC CTG GCG AGC CCA GCT CAT GGT ATA GGT ACT GAA AGT GAA TCC AGA GGC TGC ACA GGA GAG GCG CAG GGA CCC

OLIGO H3S

TGG GCT CCG CAG GCC CCA GGG AAG GGG CTG GAG TGG GTC GCA TAC ATT AGT AAA GGT GGT AGT ACC TAC TAT CCA GAC

OLIGO H4AS

TTG CAG GTA GAG GGT GTT CTT CGA GTT GTC CCT GGA GAT GGT GAA TCG GCC CTT TAC AGT GTC TGG ATA GTA GGT ACT ACC

OLIGO H5S

AAG AAC ACC CTG TAC CTG CAA ATG AAC AGT CTG CCG GCT GAG GAC AGC GGC GTC TAT TAC TGT GCA AGA GGG GGT ATG TTT

OLIGO H6AS

GGA GAC GGT GAC CAG GGT TCG TTG ACC CCA GCG GTC CAT AGG AAA GAA AAA ATC GTT ACC AAA CAT AGC CCC TCT TGC ACA

FIG. 8

A) cd11VL

GAC ATC CAG ATG ACC CAG TCT CCA GGT TCC CTG TCT GCA TCT CTG GGA GAA ACT GTC ACC ATC GAA TGT CGA GCA AGT GAG GAC ATT
 TAT AAT GCT TTA GCA TGG TAT CAG CAG AAG CCA GGG AAA TCT CCT CAG CTC CTG ATC TAT AAT ACA GAT ACC TTG CAT ACT GGG GTC
 CCA TCA CGA TTC AGT GGC AGT GGA TCT GGT ACA CAA TAT TCT CTC AAG ATA AAG AGC CTG CAA TCT GAA GAT GTC GCA AGT TAT TTC
 TGT CAG CAC TAT TTC CAT TAT CCT CGG ACG TTC GGT GGA GGG ACC AAG CTG GAG ATC AAA

B) cd11VH

CAG GTG CAG CTG GTG GAA TCA GGA CCT GGT CTG CAG CCC TCA CAG ACC CTG TCC CTC ACT TGC ACT GTC TCT GGG TTC TCA CTA
 ACC AAC AAC AAT GTG AAC TGG GTT CGA CAG GCT ACA GGA AGA GGT CTG GAG TGG AGT GGA GGA GTC TGG GCT GGT GGA GCC ACA GAT
 TAC AAT TCA GCT CTC AAA TCC CGA CTG CTG ACC ATC ACT AGG GAC ACC TCC AAG AGC CAA GTT TTC TTA AAA ATG CAC ATG CTG CAA
 TCT GAA GAC ACA GGC ACT TAC TAC TGT GGC AAG GAC GGG GGC TAT ACC AGC TCT ACC CTC TAT GCT ATG GAT GCC TGG GGT CAA GGA
 ACT TCG GTC ACC GTC TCC TCA

REPLACEMENT SHEET

C_{adM} GRAFTED VL

D I Q M T Q S P S S L S A S V G D R V T I T C E
 5' ACA GGC GTG CAC TCC GAC ATC CAG ACC CAG TCT CCA TCT TCC CTG TCT GCA TCT GTG GGA GAC CGC GTC ACC ATC 3'
 CAC CCT CTG GCG CAG TGG TAG TGT ACA GGT
 3'

A S E D I Y N A L A W Y Q Q K P G K A P K L L I Y N T D T
 5' OLIGO L1S
 GCA TGG TAT CAG CAG AAG CCA GGG AAA GCT CCT AAG CTC CTG ATC TAT AAT ACA GAT ACC
 CGT TCA CTC CTG TAA ATA TTA CGA AAT CGT ACC ATA GTC GTC TTC GGT
 3' OLIGO L2AS

L H T G V P S R F S G S G S G T D Y T L T I S S L Q P E D
 5' ACT CTC ACG ATA AGC AGC CTG CAA CCT GAA GAT
 TTG CAT ACA GGG GTC CCA
 AAC GTA TGT CCC CAG GGT AGT GCT AAG TCA CCG TCA CCT AGA CCA TGT CTG ATA TGA GAG TGC TAT TCG TCG GAC
 3' OLIGO L4AS

F A T Y F C Q H Y F H Y P R T F G Q G T K V E I K
 5' OLIGO L5S
 TTC GCA ACT TAT TTC TGT CAG CAC TAT TTC CAT TAT CCT CGG
 GTG ATA AAG GTA ATA GGA GCC TGC AAG CCA GTT OCC TGG TTC CAC CTC TAG TTT GCA CTC ATC TTA
 3' OLIGO L6AS

FIG. 8 continued

AGA TCT AAC
 3' 5'

REPLACEMENT SHEET

D₁ad11 GRAFTED VH

5' E V Q L V E S G G G L V Q P G G S L R L S C A A 3'
ACA GGC GCG CAC TCC GAG GTG CAG CTG GTG GAA TCA GGA GGT GGT CTG GTG CAG CCC GGA GGG TCC CTG CGC CTC AGC TGC
 CCC AGG GAC GCG GAG TCG ACG CGA CGG 5'

3' S G F S L T N N V N W V R Q A P G K G L E W V G G V W A 3'
AGA CCG AAG AGT GAT TGG TTG TTG TTA CAC TTG ACC CAA GCT GTC CGA GGT CCT
 AAC TGG GTT CGA CAG GCT CCA GGA AAA GGT CTG GAG TGG GTG GGA GGA GTC TGG GCT
 OLIGO H2AS 5'

5' G G A T D Y N S A L K S R R F T I S R D N S K N T A Y L Q M 3'
GGT GGA GCC ACA GAT TAC AAT TCA
 CCT CGG TGT CTA ATG TTA AGT CGA GAG TTT AGG GCT AAG TGG TAG TCA GCG CTG TTG AAG TTC TTG TGT CGA AAG AAT GTT TAC
 OLIGO H4AS 5'

3' N S L R A E D T A V Y Y C A R D G G Y S S S T L Y A M D A 3'
AAC AGT CTG CGC GCT GAA GAC ACA GCC GTT TAC TAC TGT GCC AGA GAC GGG GGC TAT AGC
 CGG TCT CTG CCC CCG ATA TCG TCG AGA TGG GAG ATA CGA TAC CTA CGG
 OLIGO H6AS 5'

W G Q G T L V T V S S
ACC CCA GTT CCT TGA GAC CAG TGG CAG AGG AGT
 3' 5'

FIG. 8 continued

FIG. 8 continued

EOLOGs TO SYNTHESIZE *ad11V*OLIGO L1S

ACA GGC GTG CAG TCC GAC ATC CAG ATG ACC CAG TCT CCA TCT TCC CTG TCT GCA TCT GTG GGA GAC CAG CTC ACC ATC

OLIGO L2AS

TGG CTT CTG CTG ATA CCA TGC TAA AGC AAT ATA AAT GTC CTC ACT TGC TCG ACA TGT GAT GGT GAC GCG GTG TCC CAC

OLIGO L3S

GCA TGG TAT CAG CAG AAG CCA GGG AAA GCT CCT AAG CTC CTG ATC TAT AAT ACA GAT ACC TTG CAT ACA GGG GTC CCA

OLIGO L4AS

CAG GGT GCT TAT CGT GAG AGT ATA GTC TGT ACC AGA TCC ACT GCC ACT GAA TCG TGA TGG GAC CCC TGT ATG CAA GGT

OLIGO L5S

ACT CTC AGC ATA AGC AGC CTG CAA CCT GAA GAT TTC GCA ACT TAT TTC TGT CAG CAC TAT TTC CAT TAT CCT CGG

OLIGO L6AS

CAA TGT AGA ATT CTA CTC AGC TTT GAT CTC CAC CTT GGT CCC TTG ACC GAA CGT CCG AGG ATA ATG GAA ATA GTG

F) OLIGO₈ TO SYNTHESIZE *ad11VH*OLIGO H1S

ACA GGC GCG CAC TCC GAG GTG CAG CTG GTG GAA TCA GGA GGT GGT CTG CAG CCC GGA GGG TCC CTG CGC CTC AGC TGC

OLIGO H2AS

TCC TGG AGC CTG TCG AAC CCA GTT CAC ATT GTT GGT TAG TGA GAA GCC AGA GGC AGC GCA GGT GAG GCG CAG GGA CCC

OLIGO H3S

AAC TGG GTT CGA CAG GCT CCA GGA AAA GGT CTG GAG TGG GTG GGA GGA GTC TGG GCT GGT GGA GGC ACA GAT TAC AAT TCA

OLIGO H4AS

CAT TTG TAA GTA AGC TGT GTT CTT GGA GTT GTC CCG ACT GAT GGT GAA TCG GGA TTT GAG AGC TGA ATT GTA ATC TGT GGC TCC

OLIGO H5S

AAG AAC ACA GCT TAC TTA CAA ATG AAC AGT CTG CGC GCT GAA GAC ACA GGC GTT TAC TGT GCT AGA GAC GGG GGC TAT AGC

OLIGO H6AS

TGA GGA GAC GGT GAC CAG AGT TCC TTG ACC CCA GGC ATC CAT AGC ATA GAG GGT AGA GCT GCT ATA GCC CCC GTC TCT GGC

REPLACEMENT SHEET

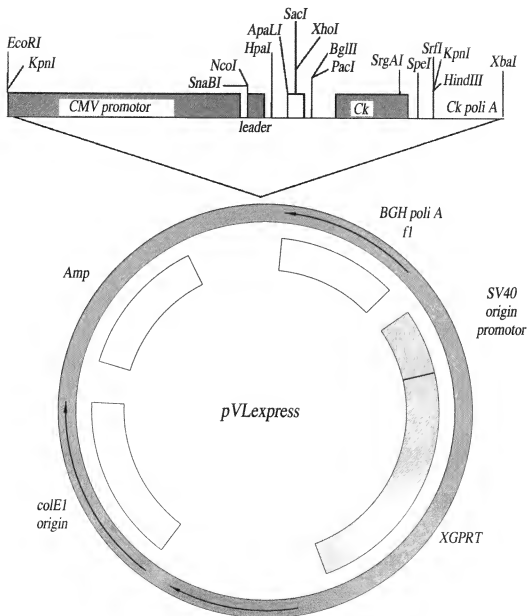


FIG. 9A

REPLACEMENT SHEET

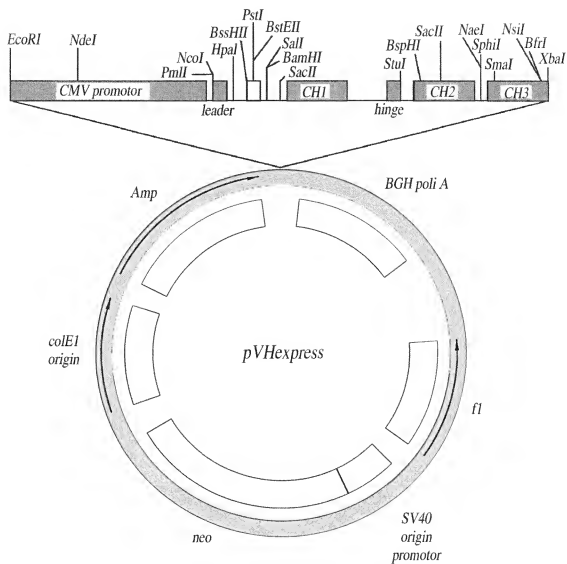


FIG. 9B

REPLACEMENT SHEET

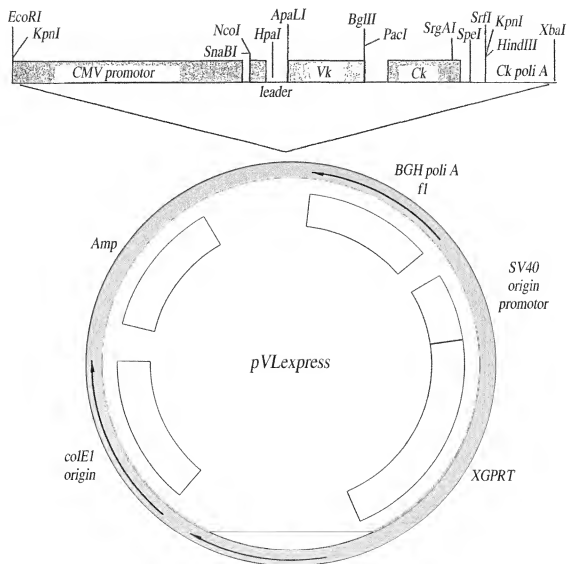


FIG. 9C

REPLACEMENT SHEET

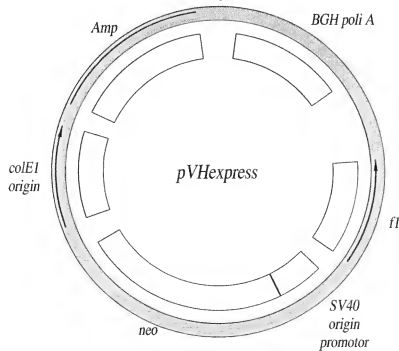
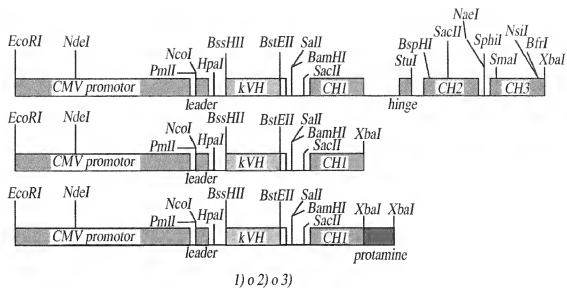


FIG. 9D

REPLACEMENT SHEET

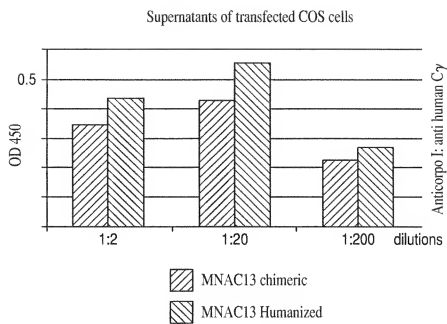


FIG. 10A

REPLACEMENT SHEET

FIG. 10B G protein sepharose purified supernatants of transfected COS cells

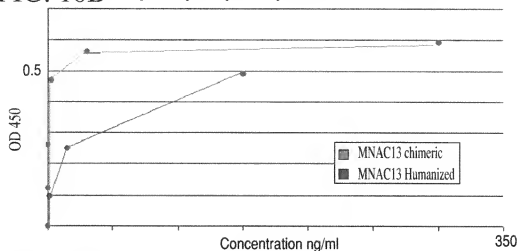


FIG. 10C G protein sepharose purified supernatants of transfected COS cells

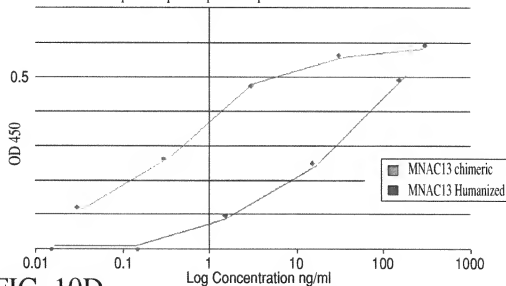
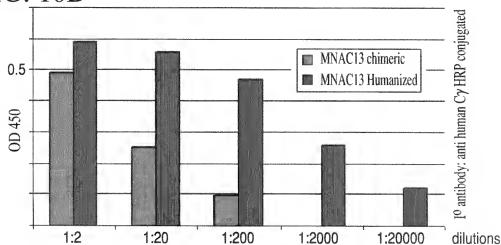


FIG. 10D



REPLACEMENT SHEET

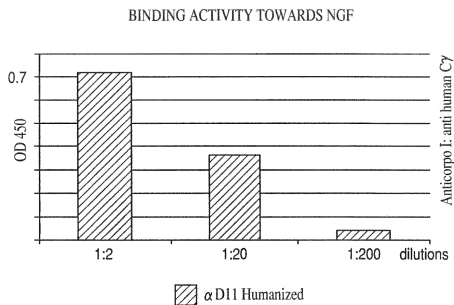


FIG. 11